

Fig. 67

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			Prognosis	Prognosis	Prognosis	Prognosis	Prognosis	Prognosis	Prognosis	Prognosis	Prognosis	Treatment Effect	
		Equivalence	Total (+) vs (-)	Total (homo)	Total	Total (+) Vs (-)	Stomach	Stomach	Stomach	Stomach	Other cancers	Other cancers	Total Vs (-)
DG	Diversity		Total	Total									Total
12	aqp_27 AS aqp_21 DG				GG66.7				DG67.7			DD67.5	no adjuvant therapy D(-)P(+)
	aqp_10 AS												
24	aqp_9 IM				II80				II67.5.2			II100	
27	aqp_6 ST				TI66.7				SI67.7			SS87.5	no adjuvant therapy S(-)P(+)
28	aqp_5 LPS				LL80. SS80	L(-)P(+)	L(-)Pheleto		LL100			LS100. SS100	
29	aqp_4 LV				VV66.9				LV67.7			LL87.5	no adjuvant therapy L(-)P(+)
36	aqp3 PS	3P=3S=9L =37D			PS68				PS69.4			PS66.3	
41	aqp9 FLY		Y(+)>P(-)	Yhetero(-)	LY71.60				LY720	Y(+)>P(-)	Yhetero(-)	LY70.80	no adjuvant therapy Y(+)>P(-) immunotherapy Y(+)>P(-)
45	aqp13 AG				AA67				AG68.4			AA65.3	
46	aqp14 LM	L=M			LM70.1				LM72.4			LL70	
55	aqp23 LR	L=R			LR67.4				RR68.1	R(+)>P(-)	Lhetero (-) Pphomo Rhetero no mo(-)	LR67.20	
	aqp26 GLY												
60	aqp28 ST	28S=28T= 30S=37I=4 6V=46E=4 7F=47Y=5 2P=52L=6 SL			ST68.2				ST77.8			TT63.4	
62	aqp30 HSY				SY75				HS100			SY100	immunotherapy H(+)>P(-)
69	aqp37 DLY				DY68				IV63.3			DY65.3	

Fig. 68

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		Equivalence	Prognosis Total (+) vs (-)	Prognosis Total (homo)	Prognosis Total (+)	Prognosis Total (+) vs (-)	Prognosis Stomach	Prognosis Stomach	Prognosis Stomach	Prognosis Total (+) vs (-)	Prognosis Other cancers	Prognosis Other cancers	Treatment Effect Total (+) vs (-)
70	aqp38	AV	A=V		VV63.4		VV71.7		AV64.7		EG64.2		
77	aqp45	EG	E=G		EG67		EG68.6		EG64.2		EG64.2		
78	aqp46	EV	E=V		EV68.2		EV77.8		VV63.4		VV63.4		
79	aqp47	FV	F=V		FV68.2		FV77.8		YV63.4		YV63.4		
84	aqp52	LP5	52P=52L		LP68.2		LP77.8		PP63.4		PP63.4		
85	aqp53	LQ	L=Q		QQ68.5		LQ68.5		QQ64.9		PR68.3		
87	aqp55	LP5R	55P=55R		LP1000		LR750		LP65.8		LP65.8		
88	aqp56	LP	L=P		LP67.20		LP68.4		P(+)>P(-)		Lhetero (-) >phomo Phetero,ho mo>(-)		
89	aqp57	ADSV			AA64.70		AS100		SV80				
98	aqp66	DE	66D=66E= 67=66V	E(+)>P(-)	DE70.1	E(+)>P(-)	DE77.00	E(+)>P(-)	DE670				no adjuvant therapy E(+)>P(-) Chemotherapy E(+)>P(-) Immunotherapy E(+)>P(-)
99	aqp67	IV	I=V	V(+)>P(-)	Ihetero>(-) >phomo Vhetero>h omo>(-)	IV70.10	V(+)>P(-)	Ihetero>(-) >phomo Vhetero>h omo>(-)	IV670				no adjuvant therapy V(+)>P(-) Chemotherapy V(+)>P(-) Immunotherapy V(+)>P(-)
102	aqp70	EGR			GG68.10		GR69.6		GG72.70				
103	aqp71	ADKT			AK1000		K183.3		AA700				
106	aqp74	AES			AS660		AE83.3		AS100				
107	aqp75	LV			LV69.6		LV71.5		LV66.4				
109	aqp77	RT			RT68.7		RT72.4		RR82.7				
116	aqp84	EQ			EE68.5		EO68.5		EE64.9				
117	aqp85	LV			VV66.5		LV68.5		VV64.9				
118	aqp86	AE6			AG67.8		EG76.1		AG80.90				

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Fig. 69

		Prognosis	Prognosis	Prognosis	Prognosis	Prognosis	Prognosis	Prognosis	Prognosis	Prognosis
		Equivalence	Total (+)	Total (homo)	Total (+) vs (-)	Stomach	Stomach	Other	Other	Total (+) vs (-)
DO	Diversity	Total	Total	Total	Stomach	Stomach	Other	Other	Other	Total
199	agp87	FLY		FY72.1		LY72.1		Other	FY75.90	Immunotherapy
121	agp89	GI		GG66.5		GI68.5			GG64.9	Y(+)%
122	agp90	IT		II66.5		II68.5			II64.9	
148	agp116	IV								
157	agp125	AGS		GS74.4		GS75.3			GS72.5	
158	agp126	HQ		HQ71.4		QQ67.9			HQ71.5	
162	agp130	QR		QR66.9		RR68.2			QR67.2	Immunotherapy
172	agp140	AT		AA66.4		AT68.4			AA64.1	RI(+)%
199	agp167	HR		HH67		HR68.4			HH65.3	
214	agp182	NS		SS66.4		NS68.4			SS64.1	
217	agp185	IT		II67.8		II69.4			II65	
229	agp197	NS		NS68		NS69.4			NS65.3	
235	agp203	IV		IV67.5		IV70.7			VV66.9	
252	agp220	HR		RR66.5		HR68.5			RR64.9	
253	agp221	HQ		QQ66.5		HQ68.5			QQ64.9	
256	agp224	QR		QR70.1		QR72.4			RR70	
	All	survived	DO71AKD		DO74AS(3)					

Fig. 70

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DQ	Diversity	Treatment Effect		Treatment Effect		Treatment Effect		Treatment Effect		Treatment Effect	
		Total (homo)	All cases	Total (+) Vs (-)	Stomach	Total (homo)	Stomach	Total (+) Vs (-)	Stomach	Total (homo)	Other cancers
app_27	AS	no adjuvant therapy D(-) >hetero (homo) no adjuvant therapy Ghomno>hetero((-))	no adjuvant therapy CG87.8	no adjuvant therapy D(-)>P(+)	no adjuvant therapy D(-) >hetero (homo) no adjuvant therapy Ghomno>hetero((-))	no adjuvant therapy CG92.6					
app_10	AS										
app_9	IM	no adjuvant therapy S(-) >hetero (homo) no adjuvant therapy Thomo>hetero((-))	no adjuvant therapy TT87.6	NIS S(-)>P(+)	no adjuvant therapy S(-) >hetero (homo) no adjuvant therapy Thomo>hetero((-))	no adjuvant therapy TT92.6					
app_6	ST	no adjuvant therapy Phomo>hetero((-))	Immunotherapy PP62	no adjuvant therapy LI->P(+)	no adjuvant therapy Lhetero>(-) no adjuvant therapy Phomo>hetero((-))	no adjuvant therapy PP92.6	no adjuvant therapy LI->P(+)				
app_5	LPS	no adjuvant therapy L(-) >hetero (homo) no adjuvant therapy Vhomo>hetero((-))	no adjuvant therapy VV87.8	no adjuvant therapy LI->P(+)	no adjuvant therapy NI- >hetero (homo) no adjuvant therapy Vhomo>hetero((-))	no adjuvant therapy VV92.6					
app_4	LV										
app_3	PS		no adjuvant therapy SS(78)				NIS(+)>P(-)	no adjuvant therapy P(-) >hetero-homo, no adjuvant therapy Shomo>hetero(-)	no adjuvant therapy SS(68.8)		
app_9	FLY	no adjuvant therapy Yhetero-homo(-)	Chemotherapy LY(64.5)	Immunotherapy Y(+)>P(-)	Immunotherapy Y(62.8)	no adjuvant therapy Y(+)>P(-)	Chemotherapy Y(+)>P(-)	Immunotherapy Fhetero(-)>homo, no adjuvant therapy Yhetero-homo(-), Chemotherapy Yhetero-homo(-)	no adjuvant therapy LY(75.1) Chemotherapy LY (65.8) Immunotherapy LY (68.1)		
app_13	AG										
app_14	LM										
app_23	LR										
app_26	GLY										
app_28	ST	Immunotherapy Hhetero>(-) >homo Immunotherapy Yhetero>(-)>homo	Immunotherapy HY(68.6)		Immunotherapy Hhetero>(-) >homo Immunotherapy Yhetero>(-)>homo	Immunotherapy HY(65.2)					
app_30	HSY										
app_37	DY		no adjuvant therapy YY(78.2), Chemotherapy DY(62.5)				no adjuvant therapy Y(+)>P(-)	no adjuvant therapy D(-) >hetero-homo, no adjuvant therapy Dhomo>hetero(-)	no adjuvant therapy YY (69.7)		

Fig. 71

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	Treatment Effect	Treatment Effect	Treatment Effect	Treatment Effect	Treatment Effect	Treatment Effect	Treatment Effect
	Total (homo)	All cases	Effect Total (+) Vs (-)	Stomach Total (homo)	Stomach cancer	Other cancers Total (+) Vs (-)	Other cancers Total (homo)
app38	Diversity	Total		Stomach Chemotherapy Ableto(-)-homo, Chemotherapy Vheto(-)-homo	Chemotherapy AV(65.2)	Chemotherapy A (+)(-)	no adjuvant therapy AV(71.3)
app45	EG						
app46	EV						
app47	FY						
app52	LPS						
app53	LQ						
app55	LPR						
app56	LP						
app57	ADSV	Immunotherapy A(homo (all survived)>(-)) hetero	Immunotherapy AA (100)	Immunotherapy Vheto(-)-homo	Immunotherapy AA(100)		
app56	DE	no adjuvant therapy Dheto(-))homo, Chemotherapy Dheto(-))homo, Immunotherapy Dheto(-))homo, no adjuvant therapy Eheto(-)-homo, Chemotherapy Eheto(-)-homo, Immunotherapy Eheto(-)-homo, Immunotherapy Eheto(-)-homo	no adjuvant therapy EE(77.7), Chemotherapy DE(62.1) Immunotherapy EE(60.3)	Chemotherapy Dheto(-)-homo, Chemotherapy Eheto(-)-homo	Chemotherapy DE(65.1)	Chemotherapy Dheto(-)-homo, Chemotherapy Eheto(-)-homo	Chemotherapy DE(59.1)
app67	IV	no adjuvant therapy Iheto(-)-homo, Chemotherapy Iheto(-)-homo, Immunotherapy Iheto(-)-homo, no adjuvant therapy Vheto(-)-homo, Chemotherapy Vheto(-)-homo, Immunotherapy Vheto(-)-homo	no adjuvant therapy IV(79.6), Chemotherapy DE(62.1) Immunotherapy EE(60.3)	Chemotherapy Iheto(-)-homo, Chemotherapy Vheto(-)-homo	Chemotherapy IV(65.1)	Chemotherapy Iheto(-)-homo, Chemotherapy Vheto(-)-homo	Chemotherapy IV(59.1)
app70	EGR						Chemotherapy VV(60.8)
app71	ADKT						no adjuvant therapy AD(41.7), Chemotherapy TT(59.9)
app74	AES						
app75	LV						
app77	RT						
app84	EO						
app85	LV						
app86	AEG	Immunotherapy Gheto(-)-homo	Immunotherapy EG(78.2)	Immunotherapy EG(+)(+)	Chemotherapy AA 70.6 Immunotherapy EG(80.8)		no adjuvant therapy AG(87.5)

Fig. 72

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	Treatment Effect	Treatment Effect	Treatment Effect	Treatment Effect	Treatment Effect	Treatment Effect	Treatment Effect
	Total (homo)	All cases	Total (+) Vs (-)	Total (homo)	Stomach cancer Stomach	Total (+) Vs (-)	Total (homo) Other cancers
DO	Diversity	Total	Stomach	Stomach	Stomach	Other cancers	Other cancers
aqp87	FLY	Immunotherapy Yhetero>homo (-)	no adjuvant therapy FY(82.3), Immunotherapy LY (71.2)	Immunother- apy F(-)>(+)	Immunotherapy / A- >(homo), Chemotherapy Flomo>hetero (-)	Chemotherapy FF(81.3), Immunotherapy LY(68.1)	no adjuvant therapy Fhetero (-) Y(75)
aqp89	GT						
aqp90	IT						
aqp116	IV						
aqp125	AGS						no adjuvant therapy AS(73.7)
aqp126	HQ						
aqp130	QR	Immunotherapy Chetero>(-)phomo, Immunotherapy Rhetero>homo>(-)	Immunotherapy QR(75)				
aqp140	AT						
aqp167	HR						
aqp182	NS						
aqp185	IT						
aqp197	NS		no adjuvant therapy SS(76)			NIS SS(70)	no adjuvant therapy St(+)>(-)
aqp203	IV						no adjuvant therapy NI-)hetero>homo, no adjuvant therapy Shomo, hetero>(-)
aqp220	HR						
aqp221	HQ						
aqp224	QR						
All survived							

Fig. 73

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		DQ	DQ	DQ	DQ	DQ
		Cancer in Family	Category	Metastases	Alcohol	Smoking
DQ	Diversity					
aqp_27	AS					
aqp_21	DG					
aqp_10	AS					
aqp_9	IM					
aqp_6	ST					
aqp_5	LPS					
aqp_4	LV					
aqp_3	PS			#		
aqp9	FLY					
aqp13	AG					
aqp14	LM			LL100, LM23.20		
aqp23	LR					
aqp26	GLY					
aqp28	ST					
aqp30	HSY			#		
aqp37	DIY					#

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Fig. 74

		DQ	DQ	DQ	DQ	DQ
		Cancer in Family	Category	Metastases	Alcohol	Smoking
DQ	Diversity					
aqp38	AV				#	#
aqp45	EG	EE50, GG19.4 O			AV24.1, VV15.6O	
aqp46	EV					
aqp47	FY					
aqp52	LPS					
aqp53	LQ	LQ26.4, QQ12.5O				
aqp55	LPR	PR29.7, LR0O				
aqp56	LP					
aqp57	ADSV					
aqp66	DE					
aqp67	IV					
aqp70	EGR					
aqp71	ADKT			#		
aqp74	AES					
aqp75	LV					
aqp77	RT			RR100, RT22.5 O		
aqp84	EQ	EQ26.4, EE12.5O				
aqp85	LV	LV26.4, VV12.5				
aqp86	AEG		GG94.4, EG82.8O			

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Fig. 75

		DQ	DQ	DQ	DQ	DQ
		Cancer in Family	Category	Metastases	Alcohol	Smoking
DQ	Diversity					
aqp87	FLY			YY50, LL20 O		
aqp89	GT	GT26.4, GG12.5				
aqp90	IT	IT26.4, II12.5				
aqp166	IV			II100, IV23.2		
aqp125	AGS			SS100, AA20 O		
aqp126	HQ					
aqp130	QR		#			
aqp140	AT	AT26.8, AA12.2 O				
aqp167	HR					
aqp182	NS	NS26.8, SS12.2 O				
aqp158	IT					
aqp197	NS			#		DI66.7, DD39.1 O
aqp203	IV	#		VV32, II22.2		
aqp220	HR	HR26.4, RR12.5 O				
aqp221	HQ	HQ26.4, QQ12.5 O				
aqp224	QR			RR100, QR23.2 O		
	All survived					

Fig. 76

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DR	Total	Stomach	Other cancers	All cases Treatment Effect	Stomach Cancer Treatment Effect	Other cancers Treatment Effect
Nucleic Acid	No. of Diversity	Total				
-16	3	agCGaGCG> agCGaGCGU				
4	3					
12	5			Immunotherapy: KAAAKAAA>KAAGKAAG> KAAAKAAG	Immunotherapy: KAAAKAAA>KAAGKAAG> KAAAKAAG	no adjuvant therapy: KAAAKAAG>KAAGKAAG
14	3					
19	2					
26	5					
28	4	hCACeGAA> hCACeGAG				
34	3					no adjuvant therapy: dCAAgCAA> gCAAgCAG
53	2					no adjuvant therapy: dGACdGAU dGAUdGAU>dGACdGAC, Chemotherapy: agCCaGCU>agCCaGCU, agCCaGCU>agCCaGCG
57	7					
58	6			no adjuvant therapy: agCCaGCG>agCUaGCU, Chemotherapy: agCUaGCU, agCCaGCG, agCCaGCU>agCCaGCGU		
69	3				no adjuvant therapy: no adjuvant therapy: rCGCrCGG>rCGGrCGU Chemotherapy: rCGCrCGG>rCGCrCGC	
72	5	rCGGrCGG> rCGCrCGG		no adjuvant therapy: rCGCrCGG>rCGGrCGU	no adjuvant therapy: rCGCrCGG>rCGGrCGU Chemotherapy: rCGCrCGU, rCGCrCGG, rCGCrCGG>rCGCrCGC	
78	3			Chemotherapy: yUACyUAC> yUAYyUAY		Chemotherapy:
90	2					
93	2					

Fig. 77

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DR	Total	All cases	Stomach Cancer	Other cancers
Nucleic Acid	No. of Diversity	Total	Stomach	Other cancers
95	2			
101	2			no adjuvant therapy: VGUGVGUG, VGUAVGUG> VGUAVGUA
104	3	atGCAaGCC> atGCAaGCA		
106	2			
112	2			
117	2			
145	2			
152	2			
166	3		no adjuvant therapy: rCGGrCGG> rCGArCGA	no adjuvant therapy: rCGGrCGG, rCGArCGG> rCGArCGA
169	2			
179	2			
181	3	tACAmAUG> tAGCmAUG		
206	2			
217	2			

Fig. 78

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DR					
Nucleic Acid	No. of Diversity	Cancer in Family	Alcohol	Metastases	Smoking
-16	3				
4	3				
12	5				
14	3				
19	2				
26	5				
28	4		eGAGeGAG(55.6), eGAAGAG(0), eGAAGAA(16.7)		
34	3				
53	2				
57	7				
58	6				
69	3				
72	5	rcGCrCGU(50), rcGCrCGG(40), rcGCrCGC(0)			
78	3				
90	2				
30	2				

Fig. 79

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DR					
Nucleic Acid	No. of Diversity	Cancer in Family	Alcohol	Metastases	Smoking
95	2			VGUCvGUC(33.2), vGUCvGUU(23.5), vGUUvGUU(42.9)	
101	2				
104	3				
106	2				
112	2				
117	2				
145	2				
152	2				
166	3				
169	2				
179	2				
181	3				
206	2				
217	2				

Fig. 80

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DR	No. of Diversity	Total	Stomach	Other cancers	All cases Treatment Effect	Stomach Cancer Treatment Effect
Nucleic Acid						
-29	2					no adjuvant therapy: pcccupccu>pcccpccu, pcccpccc
-23	2					
-15	2					Same curve as DQ_23 pccupccu>pcccpccu, pcccpccc
DQNP19	2					
DQNP21	3			IACGIACC, IACGIACG>IACCIACC		
DQNP25	2					
DQNP27	2				Immunotherapy: vGUAVGUG, vGUGvGUG>vGUAVGUA	
DQNP35	2					
DQNP38	3			agCGaGCG>agCGaGCG		
DQNP47	3					
DQNP48	2					
DQNP49	3					
DQNP57	6					
DQNP62	2			naACnaAC, naACnaAU>naAU		
DQNP72	2					
DQNP77	4			IACCIACC, IACGIACG>IACCIACC		
DQNP78	2			vGUAVGUG, vGUGvGUG> vGUAVGUA		
DQNP91	2					
DQNP93	2					
DQNP94	2					

Fig. 81

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DR	Total			All cases Treatment Effect	Stomach Cancer Treatment Effect
Nucleic Acid	No. of Diversity	Total	Stomach	Other cancers	
DQNP118	2				
DQNP135	3				
DQNP140	4				
DQNP147	2				
DQNP150	2				
DQNP154	2				
DQNP169	2				
DQNP191	2				
DQNP210	2				
DQNP213	2				
DQNP215	2				
DQNP218	2				
DQNP235	2				

Fig. 82

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DR		Other cancers	Cancer in Family	Alcohol	Metastases	Smoking
Nucleic Acid	No. of Diversity	Treatment Effect				
-29						
-23	2					
-15	2					
DQNP19	2	no adjuvant therapy. nAACnAAC, nAACnAAU> nAAUnAAU				nAACnAAC(54.7), nAACnAAU(59.8), nAAUnAAU(39.1)
DQNP 21	3	no adjuvant therapy. IACCTIACG>IACATAACG				
DQNP25	2					
DQNP27	2					
DQNP35	2					
DQNP38	3	Chemotherapy: aGCAaGCG>aGCGaGCG				
DQNP47	3					
DQNP48	2					
DQNP49	3					
DQNP57	6					
DQNP62	2					
DQNP72	2	The Same curve with DQ19 rCGGrCGG, rCGArCGG>rCGArCGA				rCGArCGA(39.1), rCGrCGG(59.8), rCGGrCGG(54.7)
DQNP77	4	Chemotherapy: rAGGrAGG>rAGArAGG, rAGArAGA				
DQNP78	2					
DQNP91	2				ICUGICUG(39.7), ICUGIUUG(26.8), IUUGIUUG(31.8)	
DQNP93	2					
DQNP94	2					

Fig. 83

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DR		Other cancers	Cancer in Family	Alcohol	Metastases	Smoking
Nucleic Acid	No. of Diversity	Treatment Effect				
DQNP118	2					
DQNP135	3				dGACdGAC(32.6), dGACdGAU(27.1), dGAUdGAU(34.4)	
DQNP140	4	no adjuvant therapy: aGCCaGCC>aCGUaGCU immunotherapy: tACCaGCU>tACCaGCC		TACCaGCC(50), tACCaGCU(21.3), tACUaGCU(20.5)		
DQNP147	2				ICUCICUC(47.8), ICUCICUU(24.5), ICUUCUU(32.1)	
DQNP150	2					
DQNP154	2					
DQNP169	2				dGACdGAC(32.6), dGACdGAU(27.1), dGAUdGAU(34.4)	
DQNP191	2					
DQNP210	2			ICUCICUC(50), ICUCICUG(18.6), ICUGICUG(22.5)		
DQNP213	2				ICUCICUC(32.6), ICUCICUU(27.1), ICUUCUU(34.4)	
DQNP215	2				LCUUCUU(47.8), ICUGICUU(24.5), ICUGICUG(32.1)	
DQNP218	2					
DQNP235	2					

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Fig. 84

DP		Total			All Cases	Stomach Cancer	Other cancers
Nucleic Acid	No. of Diversity	Total	Stomach	Other cancers	Treatment Effect	Treatment Effect	Treatment Effect
98	2	All same with the survival curve					
107	2	All same with the survival curve					
118	2	All same with the survival curve					
167	2	All same with the survival curve					
179	2	All same with the survival curve					
		All NS					

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Fig. 85

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
29	M						M	M	M	
28	M						M	M	M	
27	V						V	V	V	
26	L						L	L	L	
25	Q						Q	Q	Q	
24	V						V	V	V	
23	S						S	S	S	
22	A						A	A	A	
21	A						A	A	A	
20	P						P	P	P	
19	Q						R	R	R	
18	T						T	T	T	
17	V						V	V	V	
16	A						A	A	A	
15	L						L	L	L	
14	T						T	T	T	
13	A						A	A	A	
12	L						L	L	L	
11	L						L	L	L	
10	M						M	M	M	
9	V						V	V	V	
8	L						L	L	L	
7	L						L	L	L	
6	T						T	T	T	
5	S						S	S	S	
4	V						V	V	V	
3	V						V	V	V	
2	Q						Q	Q	Q	
1	G						G	G	G	
1	R						R	R	R	
2	A						A	A	A	
3	T						T	T	T	
4	P						P	P	P	
5	E						E	E	E	
6	N						N	N	N	
7	Y						Y	Y	Y	
8	L	V					L or V	L or V	L or V	
9	F	H	Y				()	()	()	DP8 LV and DP F
10	Q						Q	Q	Q	
11	G	L					G or L	G or L	G or L	
12	R						R	R	R	
13	Q						Q	Q	Q	
14	E						E	E	E	
15	C						C	C	C	
16	Y						Y	Y	Y	
17	A						A	A	A	
18	F						F	F	F	
19	N						N	N	N	
20	G						G	G	G	
21	T						T	T	T	
22	Q						Q	Q	Q	
23	R						R	R	R	
24	F						F	F	F	
25	L						L	L	L	
26	E						E	E	E	
27	R						R	R	R	
28	Y						Y	Y	Y	

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Fig. 86

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
29	I						I	I	I	
30	Y						Y	Y	Y	
31	N						N	N	N	
32	R						R	R	R	
33	E						E	E	E	
34	E						E	E	E	
35	F	L	Y				()	()	()	
36	A	V					A or V	A or V	AV	
37	R						R	R	R	
38	F						F	F	F	
39	D						D	D	D	
40	S						S	S	S	
41	D						D	D	D	
42	V						V	V	V	
43	G						G	G	G	
44	E						E	E	E	
45	F						F	F	F	
46	R						R	R	R	
47	A						A	A	A	
48	V						V	V	V	
49	T						T	T	T	
50	E						E	E	E	
51	L						L	L	L	
52	G						G	G	G	
53	R						R	R	R	
54	P						P	P	P	
55	A	D	E				AD	()	()	
56	A	E					()	()	()	
57	D	E					()	DE	()	
58	Y						Y	Y	Y	
59	W						W	W	W	
60	N						N	N	N	
61	S						S	S	S	
62	Q						Q	Q	Q	
63	K						K	K	K	
64	D						D	D	D	
65	F	I	L				IL	I or L	I or L	
66	L						L	L	L	
67	E						E	E	E	
68	E						E	E	E	
69	E	K					EK	E or K	E or K	
70	R						R	R	R	
71	A						A	A	A	
72	V						V	V	V	
73	P						P	P	P	
74	D						D	D	D	
75	R						R	R	R	
76	I	M	V				()	()	IM	
77	C						C	C	C	
78	R						R	R	R	
79	H						H	H	H	
80	N						N	N	N	
81	Y						Y	Y	Y	
82	E						E	E	E	
83	L						L	L	L	
84	D	G					()	DG	()	
85	E	G					()	EG	()	

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Fig. 87

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
86	A	P					()	()	()	
87	M	V					()	MV	()	
88	T						T	T	T	
89	L						L	L	L	
90	Q						Q	Q	Q	
91	R						R	R	R	
92	R						R	R	R	
93	V						V	V	V	
94	Q						Q	Q	Q	
95	P						P	P	P	
96	K	R					()	()	()	
97	V						V	V	V	
98	N						N	N	N	
99	V						V	V	V	
100	S						S	S	S	
101	P						P	P	P	
102	S						S	S	S	
103	K						K	K	K	
104	K						K	K	K	
105	G						G	G	G	
106	P						P	P	P	
107	L						L	L	L	
108	Q						Q	Q	Q	
109	H						H	H	H	
110	H						H	H	H	
111	N						N	N	N	
112	L						L	L	L	
113	L						L	L	L	
114	V						V	V	V	
115	C						C	C	C	
116	H						H	H	H	
117	V						V	V	V	
118	T						T	T	T	
119	D						D	D	D	
120	F						F	F	F	
121	Y						Y	Y	Y	
122	P						P	P	P	
123	G						G	G	G	
124	S						S	S	S	
125	I						I	I	I	
126	Q						Q	Q	Q	
127	V						V	V	V	
128	R						R	R	R	
129	W						W	W	W	
130	F						F	F	F	
131	L						L	L	L	
132	N						N	N	N	
133	G						G	G	G	
134	Q						Q	Q	Q	
135	E						E	E	E	
136	E						E	E	E	
137	T						T	T	T	
138	A						A	A	A	
139	G						G	G	G	
140	V						V	V	V	
141	V						V	V	V	
142	S						S	S	S	
143	T						T	T	T	
144	N						N	N	N	

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Fig. 88

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
145	L						L	L	L	
146	I						I	I	I	
147	R						R	R	R	
148	N						N	N	N	
149	G						G	G	G	
150	D						D	D	D	
151	W						W	W	W	
152	T						T	T	T	
153	F						F	F	F	
154	Q						Q	Q	Q	
155	I						I	I	I	
156	L						L	L	L	
157	V						V	V	V	
158	M						M	M	M	
159	L						L	L	L	
160	E						E	E	E	
161	M						M	M	M	
162	T						T	T	T	
163	P						P	P	P	
164	Q						Q	Q	Q	
165	Q						Q	Q	Q	
166	G						G	G	G	
167	D						D	D	D	
168	V						V	V	V	
169	Y						Y	Y	Y	
170	I	T					I	I	I	
171	C						C	C	C	
172	Q						Q	Q	Q	
173	V						V	V	V	
174	E						E	E	E	
175	H						H	H	H	
176	T						T	T	T	
177	S						S	S	S	
178	L	M					LM	I	I	
179	D						D	D	D	
180	S						S	S	S	
181	P						P	P	P	
182	V						V	V	V	
183	T						T	T	T	
184	V						V	V	V	
185	E						E	E	E	
186	W						W	W	W	
187	K						K	K	K	
188	A						A	A	A	
189	Q						Q	Q	Q	
190	S						S	S	S	
191	D						D	D	D	
192	S						S	S	S	
193	A						A	A	A	
194	R						R	R	R	
195	S						S	S	S	
196	K						K	K	K	
197	T						T	T	T	
198	L						L	L	L	
199	T						T	T	T	
200	G						G	G	G	
201	A						A	A	A	
202	G						G	G	G	
203	G						G	G	G	

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Fig. 89

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
204	F						F	F	F	
205	V						V	V	V	
206	L						L	L	L	
207	G						G	G	G	
208	L						L	L	L	
209	I						I	I	I	
210	I						I	I	I	
211	C						C	C	C	
212	G						G	G	G	
213	V						V	V	V	
214	G						G	G	G	
215	I						I	I	I	
216	F						F	F	F	
217	M						M	M	M	
218	H						H	H	H	
219	R						R	R	R	
220	R						R	R	R	
221	S						S	S	S	
222	K						K	K	K	
223	K						K	K	K	
224	V						V	V	V	
225	Q						Q	Q	Q	
226	R						R	R	R	
227	G						G	G	G	
228	S						S	S	S	
229	A						A	A	A	

"or" – expected to be the same antigen

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Fig. 90

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
32	M						M	M	M	
31	S						S	S	S	
30	W						W	W	W	
29	K						K	K	K	
28	K						K	K	K	
27	A	S					()	()	()	
26	L						L	L	L	
25	R						R	R	R	
24	I						I	I	I	
23	P						P	P	P	
22	G						G	G	G	
21	D	G					GG	()	GG	
20	L						L	L	L	
19	R						R	R	R	
18	A	V					()	()	()	
17	A						A	A	A	
16	T						T	T	T	
15	V						V	V	V	
14	T						T	T	T	
13	L						L	L	L	
12	M						M	M	M	
11	L						L	L	L	
10	A	S					()	()	()	
9	I	M					()	()	()	
8	L						L	L	L	
7	S						S	S	S	
6	S	T					TT	()	TT	
5	L	P	S				()	()	PP	
4	L	V					VV	()	VV	
3	A						A	A	A	
2	E						E	E	E	
1	G						G	G	G	
1	R						R	R	R	
2	D						D	D	D	
3	P	S					SS	PS	P or S	
4	P						P	P	P	
5	E						E	E	E	
6	D						D	D	D	
7	F						F	F	F	
8	V						V	V	V	
9	F	L	Y				()	LY	YY	DQ3 PS is same as DQ9 L
10	Q						Q	Q	Q	
11	F						F	F	F	
12	K						K	K	K	
13	A	G					()	AA	GG	
14	L	M					L or M	L or M	LM	
15	C						C	C	C	
16	Y						Y	Y	Y	
17	F						F	F	F	
18	T						T	T	T	
19	N						N	N	N	
20	G						G	G	G	
21	T						T	T	T	
22	E						E	E	E	
23	L	R					LR	L or R	RR	
24	V						V	V	V	
25	R						R	R	R	
26	G	L	Y				()	()	()	
27	V						V	V	V	

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Fig. 91

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
28	S	T					S or T	S or T	S or T	
29	R						R	R	R	
30	H	S	Y				HH	()	HY	
31	I						I	I	I	
32	Y						Y	Y	Y	
33	N						N	N	N	
34	R						R	R	R	
35	E						E	E	E	
36	E						E	E	E	
37	D	I	Y				YY	DY	()	DQ28 ST is same as DQ37I
38	A	V					A or V	A or V	A or V	
39	R						R	R	R	
40	F						F	F	F	
41	D						D	D	D	
42	S						S	S	S	
43	D						D	D	D	
44	V						V	V	V	
45	E	G					E or G	EG	E or G	
46	E	V					()	()	()	DQ28 ST is same as DQ46VE
47	F	Y					()	()	()	DQ28 ST is same as DQ47FY
48	R						R	R	R	
49	A						A	A	A	
50	V						V	V	V	
51	T						T	T	T	
52	L	P					()	()	()	DQ28 ST is same as DQ52PL
53	L	Q					LL	L or Q	L or Q	
54	G						G	G	G	
55	L	P	R				P or R	P or R	P or R	DQ28 ST is same as DQ55L
56	L	P					LP	PP	L or P	
57	A	D	S	V			()	()	AA	
58	A						A	A	A	
59	E						E	E	E	
60	Y						Y	Y	Y	
61	W						W	W	W	
62	N						N	N	N	
63	S						S	S	S	
64	Q						Q	Q	Q	
65	K						K	K	K	
66	D	E					DE	DE	EE	
67	I	V					IV	IV	VV	
68	L						L	L	L	
69	E						E	E	E	
70	E	G	R				()	()	()	
71	A	D	K	T			()	()	AT	
72	R						R	R	R	
73	A						A	A	A	
74	A	E	S				ES	()	ES	
75	L	V					LV	()	()	
76	D						D	D	D	
77	R	T					()	()	RT	
78	V						V	V	V	
79	C						C	C	C	
80	R						R	R	R	
81	H						H	H	H	
82	N						N	N	N	
83	Y						Y	Y	Y	
84	E	Q					QQ	()	QQ	
85	L	V					LL	()	()	
86	A	E	G				()	()	EG	

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Fig. 92

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
87	F	L	Y				FY	()	LY	
88	R						R	R	R	
89	G	T					TT	()	()	
90	I	T					TT	()	()	
91	L						L	L	L	
92	Q						Q	Q	Q	
93	R						R	R	R	
94	R						R	R	R	
95	V						V	V	V	
96	E						E	E	E	
97	P						P	P	P	
98	T						T	T	T	
99	V						V	V	V	
100	T						T	T	T	
101	I						I	I	I	
102	S						S	S	S	
103	P						P	P	P	
104	S						S	S	S	
105	R						R	R	R	
106	T						T	T	T	
107	E						E	E	E	
108	A						A	A	A	
109	L						L	L	L	
110	N						N	N	N	
111	H						H	H	H	
112	H						H	H	H	
113	N						N	N	N	
114	L						L	L	L	
115	L						L	L	L	
116	I	V					()	()	IV	
117	C						C	C	C	
118	S						S	S	S	
119	V						V	V	V	
120	T						T	T	T	
121	D						D	D	D	
122	F						F	F	F	
123	Y						Y	Y	Y	
124	P						P	P	P	
125	A	G	S				GS	()	()	
126	H	Q					()	HQ	()	
127	I						I	I	I	
128	K						K	K	K	
129	V						V	V	V	
130	Q	R					()	RR	QR	
131	W						W	W	W	
132	F						F	F	F	
133	R						R	R	R	
134	N						N	N	N	
135	D						D	D	D	
136	Q						Q	Q	Q	
137	E						E	E	E	
138	E						E	E	E	
139	T						T	T	T	
140	A	T					TT	()	()	
141	G						G	G	G	
142	V						V	V	V	
143	V						V	V	V	
144	S						S	S	S	
145	T						T	T	T	

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Fig. 93

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
146	P						P	P	P	
147	L						L	L	L	
148	I						I	I	I	
149	T						T	T	T	
150	N						N	N	N	
151	G						G	G	G	
152	D						D	D	D	
153	W						W	W	W	
154	T						T	T	T	
155	F						F	F	F	
156	Q						Q	Q	Q	
157	I						I	I	I	
158	L						L	L	L	
159	V						V	V	V	
160	M						M	M	M	
161	L						L	L	L	
162	E						E	E	E	
163	M						M	M	M	
164	T						T	T	T	
165	P						P	P	P	
166	Q						Q	Q	Q	
167	H	R					()	HH	RR	
168	G						G	G	G	
169	D						D	D	D	
170	V						V	V	V	
171	Y						Y	Y	Y	
172	T						T	T	T	
173	C						C	C	C	
174	H						H	H	H	
175	V						V	V	V	
176	E						E	E	E	
177	H						H	H	H	
178	P						P	P	P	
179	S						S	S	S	
180	L						L	L	L	
181	Q						Q	Q	Q	
182	N	S					NN	()	()	
183	P						P	P	P	
184	I						I	I	I	
185	I	T					II	TT	()	
186	V						V	V	V	
187	E						E	E	E	
188	W						W	W	W	
189	R						R	R	R	
190	A						A	A	A	
191	Q						Q	Q	Q	
192	S						S	S	S	
193	E						E	E	E	
194	S						S	S	S	
195	A						A	A	A	
196	Q						Q	Q	Q	
197	N	S					SS	NS	()	
198	K						K	K	K	
199	M						M	M	M	
200	L						L	L	L	
201	S						S	S	S	
202	G						G	G	G	
203	I	V					()	()	()	
204	G						G	G	G	

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Fig. 94

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
205	G						G	G	G	
206	F						F	F	F	
207	V						V	V	V	
208	L						L	L	L	
209	G						G	G	G	
210	L						L	L	L	
211	I						I	I	I	
212	F						F	F	F	
213	L						L	L	L	
214	G						G	G	G	
215	L						L	L	L	
216	G						G	G	G	
217	L						L	L	L	
218	I						I	I	I	
219	I						I	I	I	
220	H	R					HH	()	()	
221	H	Q					HH	()	()	
222	R						R	R	R	
223	S						S	S	S	
224	Q	R					()	()	QR	
225	K						K	K	K	
226	G						G	G	G	
227	P						P	P	P	
228	Q						Q	Q	Q	
229	G						G	G	G	
230	P						P	P	P	
231	P						P	P	P	
232	P						P	P	P	
233	A						A	A	A	
234	G						G	G	G	
235	L						L	L	L	
236	L						L	L	L	
237	H						H	H	H	

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Fig. 95

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
29	M						M	M	M	
28	V						V	V	V	
27	C						C	C	C	
26	L						L	L	L	
25	K	R					RR	RR	RR	
24	F	L					F or L	F or L	F or L	
23	P						P	P	P	
22	G						G	G	G	
21	G						G	G	G	
20	S						S	S	S	
19	C						C	C	C	
18	M						M	M	M	
17	A	T					AA	AA	AA	
16	A	V					VV	VV	A or V	
15	L						L	L	L	
14	T						T	T	T	
13	V						V	V	V	
12	T						T	T	T	
11	L						L	L	L	
10	M						M	M	M	
9	V						V	V	V	
8	L						L	L	L	
8	S						S	S	S	
6	S						S	S	S	
5	P						P	P	P	
4	L						L	L	L	
3	A						A	A	A	
2	L						L	L	L	
1	A	S					A or S	A or S	AA	
1	G						G	G	G	
2	D						D	D	D	
3	T						T	T	T	
4	Q	R					Q or R	Q or R	QR	
5	P						P	P	P	
6	R						R	R	R	
7	F						F	F	F	
8	L						L	L	L	
9	E	K	W				()	WW	KW	
10	E	Q	Y				YY	()	()	
11	D	G	L	P	S	V	DS	()	DP	
12	K	T					K or T	K or T	K or T	
13	F	G	H	R	S	Y	GH	()	FS	
14	E	K					E or K	E or K	E or K	
15	C						C	C	C	
16	H	Q	Y				()	YY	()	
17	F						F	F	F	
18	F						F	F	F	
19	N						N	N	N	
20	G						G	G	G	
21	T						T	T	T	
22	E						E	E	E	
23	R						R	R	R	
24	V						V	V	V	
25	Q	R					Q or R	Q or R	Q or R	
26	F	L	Y				FL	()	FL	
27	L						L	L	L	
28	D	E	H				()	()	()	
29	R						R	R	R	
30	C	G	H	L	R	Y	()	()	()	

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Fig. 96

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
31	F	I	V				F or I	F or I	FI	
32	H	Y					HH	()	()	
33	H	N					()	()	HH	
34	Q						Q	Q	Q	
35	E						E	E	E	
36	E						E	E	E	
37	F	L	N	S	Y		()	LY	NS	
38	A	L	V				()	()	VV	
39	R						R	R	R	
40	F	Y					F or Y	F or Y	FF	
41	D						D	D	D	
42	S						S	S	S	
43	D						D	D	D	
44	V						V	V	V	
45	G						G	G	G	
46	E						E	E	E	
47	F	Y					F or Y	F or Y	F or Y	
48	R						R	R	R	
49	A						A	A	A	
50	V						V	V	V	
51	T						T	T	T	
52	E						E	E	E	
53	L						L	L	L	
54	G						G	G	G	
55	R						R	R	R	
56	P						P	P	P	
57	A	D	S	V			AV	AV	AV	
58	A	E					A or E	A or E	A or E	
59	E						E	E	E	
60	H	S	Y				()	YY	HS	
61	W						W	W	W	
62	N						N	N	N	
63	S						S	S	S	
64	Q						Q	Q	Q	
65	K						K	K	K	
66	D						D	D	D	
67	F	I	L				FF	FI	FL	
68	L						L	L	L	
69	E						E	E	E	
70	D	Q	R				()	DD	()	
71	A	E	K	R			A	A	A	
72	R						R	R	R	
73	A	G					AA	A or G	A or G	
74	A	E	L	Q	R		()	LL	AE	
75	V						V	V	V	
76	D						D	D	D	
77	N	T					N or T	N or T	N or T	
78	V	Y					VV	V or Y	VY	
79	C						C	C	C	
80	R						R	R	R	
81	H						H	H	H	
82	N						N	N	N	
83	Y						Y	Y	Y	
84	G						G	G	G	
85	A	V					A or V	A or V	VV	
86	G	V					VV	GV	GG	
87	E						E	E	E	
88	S						S	S	S	
89	F						F	F	F	

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Fig. 97

Position	Diverse Amino Acid					no adjuvant therapy	Chemotherapy	Immunotherapy	
90	T					T	T	T	
91	V					V	V	V	
92	Q					Q	Q	Q	
93	R					R	R	R	
94	R					R	R	R	
95	V					V	V	V	
96	E	H	Q	Y		EQ	()	()	
97	P					P	P	P	
98	E	K				EK	E or K	EK	
99	V					V	V	V	
100	T					T	T	T	
101	V					V	V	V	
102	Y					Y	Y	Y	
103	P					P	P	P	
104	A	S				AA	A or S	AK	O
105	K					K	K	K	
106	T					T	T	T	
107	Q					Q	Q	Q	
108	P					P	P	P	
109	L					L	L	L	
110	Q					Q	Q	Q	
111	H					H	H	H	
112	H					H	H	H	
113	N					N	N	N	
114	L					L	L	L	
115	L					L	L	L	
116	V					V	V	V	
117	C					C	C	C	
118	S					S	S	S	
119	V					V	V	V	
120	N	S				S or N	NN	SS	
121	F					F	F	F	
122	G					G	G	G	
123	Y					Y	Y	Y	
124	P					P	P	P	
125	G					G	G	G	
126	S					S	S	S	
127	I					I	I	I	
128	E					E	E	E	
129	V					V	V	V	
130	R					R	R	R	
131	W					W	W	W	
132	F					F	F	F	
133	L	R				RR	L or R	RR	
134	N					N	N	N	
135	G					G	G	G	
136	Q					Q	Q	Q	
137	E					E	E	E	
138	E					E	E	E	
139	K					K	K	K	
140	A	T				()	TT	()	
141	G					G	G	G	
142	M	V				VV	M or V	VV	
143	V					V	V	V	
144	S					S	S	S	
145	T					T	T	T	
146	G					G	G	G	
147	L					L	L	L	
148	I					I	I	I	

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Fig. 98

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
149	H	Q					H or Q	HH	HH	
150	N						N	N	N	
151	G						G	G	G	
152	D						D	D	D	
153	W						W	W	W	
154	T						T	T	T	
155	F						F	F	F	
156	Q						Q	Q	Q	
157	T						T	T	T	
158	L						L	L	L	
159	V						V	V	V	
160	M						M	M	M	
161	L						L	L	L	
162	E						E	E	E	
163	T						T	T	T	
164	F	V					()	()	()	
165	P						P	P	P	
166	Q	R					Q or R	Q or R	RR	
167	S						S	S	S	
168	G						G	G	G	
169	E						E	E	E	
170	V						V	V	V	
171	Y						Y	Y	Y	
172	T						T	T	T	
173	C						C	C	C	
174	Q						Q	Q	Q	
175	V						V	V	V	
176	E						E	E	E	
177	H						H	H	H	
178	P						P	P	P	
179	S						S	S	S	
180	L	V					L or V	L or V	L or V	
181	M	T					()	()	()	
182	S						S	S	S	
183	P						P	P	P	
184	L						L	L	L	
185	T						T	T	T	
186	V						V	V	V	
187	E						E	E	E	
188	W						W	W	W	
189	R	S					RR	R or S	R or S	
190	A						A	A	A	
191	R						R	R	R	
192	S						S	S	S	
193	E						E	E	E	
194	S						S	S	S	
195	A						A	A	A	
196	Q						Q	Q	Q	
197	S						S	S	S	
198	K						K	K	K	
199	M						M	M	M	
200	L						L	L	L	
201	S						S	S	S	
202	G						G	G	G	
203	V						V	V	V	
204	G						G	G	G	
205	G						G	G	G	
206	F						F	F	F	
207	V						V	V	V	

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Fig. 99

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
208	L						L	L	L	
209	G						G	G	G	
210	L						L	L	L	
211	L						L	L	L	
212	F						F	F	F	
213	L						L	L	L	
214	G						G	G	G	
215	A						A	A	A	
216	G						G	G	G	
217	L						L	L	L	
218	F						F	F	F	
219	I						I	I	I	
220	Y						Y	Y	Y	
221	F						F	F	F	
222	R						R	R	R	
223	N						N	N	N	
224	Q						Q	Q	Q	
225	K						K	K	K	
226	G						G	G	G	
227	H						H	H	H	
228	S						S	S	S	
229	G						G	G	G	
230	L						L	L	L	
231	P	Q					P or Q	P or Q	QQ	
232	P						P	P	P	
233	R	T					R or T	R or T	R or T	
234	G						G	G	G	
235	F						F	F	F	
236	L						L	L	L	
237	S						S	S	S	

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Fig. 100

Position	Diverse Amino Acid					Amino Acid Configuration to Inhibit Metastases
29	M					M
28	M					M
27	V					V
26	L					L
25	Q					Q
24	V					V
23	S					S
22	A					A
21	A					A
20	P					P
19	R					R
18	T					T
17	V					V
16	A					A
15	L					L
14	T					T
13	A					A
12	L					L
11	L					L
10	M					M
9	V					V
8	L					L
7	L					L
6	T					T
5	S					S
4	V					V
3	V					V
2	Q					Q
1	G					G
1	R					R
2	A					A
3	T					T
4	P					P
5	E					E
6	N					N
7	Y					Y
8	L	V				()
9	F	H	Y			()
10	Q					Q
11	G	L				()
12	R					R
13	Q					Q
14	E					E
15	C					C
16	Y					Y
17	A					A
18	F					F
19	N					N
20	G					G
21	T					T
22	Q					Q
23	R					R
24	F					F
25	L					L
26	E					E
27	R					R
28	Y					Y
29	I					I
30	Y					Y

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Fig. 101

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
31	N						N
32	R						R
33	E						E
34	E						E
35	F	L	Y				()
36	A	V					()
37	R						R
38	F						F
39	D						D
40	S						S
41	D						D
42	V						V
43	G						G
44	E						E
45	F						F
46	R						R
47	A						A
48	V						V
49	T						T
50	E						E
51	L						L
52	G						G
53	R						R
54	P						P
55	A	D	E				AA
56	A	E					()
57	D	E					()
58	Y						Y
59	W						W
60	N						N
61	S						S
62	Q						Q
63	K						K
64	D						D
65	F	I	L				()
66	L						L
67	E						E
68	E						E
69	E	K					()
70	R						R
71	A						A
72	V						V
73	P						P
74	D						D
75	R						R
76	I	M	V				()
77	C						C
78	R						R
79	H						H
80	N						N
81	Y						Y
82	E						E
83	L						L
84	D	G					()
85	E	G					()
86	A	P					()
87	M	V					()
88	T						T
89	L						L

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Fig. 102

Position	Diverse Amino Acid					Amino Acid Configuration to Inhibit Metastases
90	Q					Q
91	R					R
92	R					R
93	V					V
94	Q					Q
95	P					P
96	K	R				Q
97	V					V
98	N					N
99	V					V
100	S					S
101	P					P
102	S					S
103	K					K
104	K					K
105	G					G
106	P					P
107	L					L
108	Q					Q
109	H					H
110	H					H
111	N					N
112	L					L
113	L					L
114	V					V
115	C					C
116	H					H
117	V					V
118	T					T
119	D					D
120	F					F
121	Y					Y
122	P					P
123	G					G
124	S					S
125	I					I
126	Q					Q
127	V					V
128	R					R
129	W					W
130	F					F
131	L					L
132	N					N
133	G					G
134	Q					Q
135	E					E
136	E					E
137	T					T
138	A					A
139	G					G
140	V					V
141	V					V
142	S					S
143	T					T
144	N					N
145	L					L
146	I					I
147	R					R
148	N					N

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Fig. 103

Position	Diverse Amino Acid					Amino Acid Configuration to Inhibit Metastases
149	G					G
150	D					D
151	W					W
152	T					T
153	F					F
154	Q					Q
155	I					I
156	L					L
157	V					V
158	M					M
159	L					L
160	E					E
161	M					M
162	T					T
163	P					P
164	Q					Q
165	Q					Q
166	G					G
167	D					D
168	V					V
169	Y					Y
170	I	T				I
171	C					C
172	Q					Q
173	V					V
174	E					E
175	H					H
176	T					T
177	S					S
178	I	M				I
179	D					D
180	S					S
181	P					P
182	V					V
183	T					T
184	V					V
185	E					E
186	W					W
187	K					K
188	A					A
189	Q					Q
190	S					S
191	D					D
192	S					S
193	A					A
194	R					R
195	S					S
196	K					K
197	T					T
198	L					L
199	T					T
200	G					G
201	A					A
202	G					G
203	G					G
204	F					F
205	V					V
206	L					L
207	G					G

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Fig. 104

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
208	L						L
209	I						I
210	I						I
211	C						C
212	G						G
213	V						V
214	G						G
215	I						I
216	F						F
217	M						M
218	H						H
219	R						R
220	R						R
221	S						S
222	K						K
223	K						K
224	V						V
225	Q						Q
226	R						R
227	G						G
228	S						S
229	A						A

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Fig. 105

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
32	M						M
31	S						S
30	W						W
29	K						K
28	K						K
27	A	S					Q
26	L						L
25	R						R
24	I						I
23	P						P
22	G						G
21	D	G					Q
20	L						L
19	R						R
18	A	V					Q
17	A						A
16	T						T
15	V						V
14	T						T
13	L						L
12	M						M
11	L						L
10	A	S					Q
9	I	M					Q
8	L						L
7	S						S
6	S	T					Q
5	L	P	S				Q
4	L	V					Q
3	A						A
2	E						E
1	G						G
2	R						R
2	D						D
3	P	S					Q
4	P						P
5	E						E
6	D						D
7	F						F
8	V						V
9	F	L	Y				Q
10	Q						Q
11	F						F
12	K						K
13	A	G					Q
14	L	M					LM
15	C						C
16	Y						Y
17	F						F
18	T						T
19	N						N
20	G						G
21	T						T
22	E						E
23	L	R					Q
24	V						V
25	R						R
26	G	L	Y				Q
27	V						V

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Fig. 106

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
28	S	T					()
29	R						R
30	H	S	Y				()
31	I						I
32	Y						Y
33	N						N
34	R						R
35	E						E
36	E						E
37	D	I	Y				()
38	A	V					()
39	R						R
40	F						F
41	D						D
42	S						S
43	D						D
44	V						V
45	E	G					()
46	E	V					()
47	F	Y					()
48	R						R
49	A						A
50	V						V
51	T						T
52	L	P					()
53	L	Q					()
54	G						G
55	L	P	R				()
56	L	P					()
57	A	D	S	V			()
58	A						A
59	E						E
60	Y						Y
61	W						W
62	N						N
63	S						S
64	Q						Q
65	K						K
66	D	E					()
67	I	V					()
68	L						L
69	E						E
70	E	G	R				()
71	A	D	K	T			()
72	R						R
73	A						A
74	A	E	S				()
75	L	V					()
76	D						D
77	R	T					RT
78	V						V
79	C						C
80	R						R
81	H						H
82	N						N
83	Y						Y
84	E	Q					()
85	L	V					()
86	A	E	G				()

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Fig. 107

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
87	F	L	Y				LL
88	R						R
89	G	T					Q
90	I	T					Q
91	L						L
92	Q						Q
93	R						R
94	R						R
95	V						V
96	E						E
97	P						P
98	T						T
99	V						V
100	T						T
101	I						I
102	S						S
103	P						P
104	S						S
105	R						R
106	T						T
107	E						E
108	A						A
109	L						L
110	N						N
111	H						H
112	H						H
113	N						N
114	L						L
115	L						L
116	I	V					IV
117	C						C
118	S						S
119	V						V
120	T						T
121	D						D
122	F						F
123	Y						Y
124	P						P
125	A	G	S				AA
126	H	Q					Q
127	I						I
128	K						K
129	V						V
130	Q	R					Q
131	W						W
132	F						F
133	R						R
134	N						N
135	D						D
136	Q						Q
137	E						E
138	E						E
139	T						T
140	A	T					Q
141	G						G
142	V						V
143	V						V
144	S						S
145	T						T

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Fig. 108

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
146	P						P
147	L						L
148	I						I
149	R						R
150	N						N
151	G						G
152	D						D
153	W						W
154	T						T
155	F						F
156	Q						Q
157	I						I
158	L						L
159	V						V
160	M						M
161	L						L
162	E						E
163	M						M
164	T						T
165	P						P
166	Q						Q
167	H	R					H
168	G						G
169	D						D
170	V						V
171	Y						Y
172	T						T
173	C						C
174	H						H
175	V						V
176	E						E
177	H						H
178	P						P
179	S						S
180	L						L
181	Q						Q
182	N	S					N
183	P						P
184	I						I
185	I	T					I
186	V						V
187	E						E
188	W						W
189	R						R
190	A						A
191	Q						Q
192	S						S
193	E						E
194	S						S
195	A						A
196	Q						Q
197	N	S					N
198	K						K
199	M						M
200	L						L
201	S						S
202	G						G
203	I	V					I
204	G						G

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Fig. 109

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
205	G						G
206	F						F
207	V						V
208	L						L
209	G						G
210	L						L
211	I						I
212	F						F
213	L						L
214	G						G
215	L						L
216	G						G
217	L						L
218	I						I
219	I						I
220	H	R					I
221	H	Q					I
222	R						R
223	S						S
224	Q	R					QR
225	K						K
226	G						G
227	P						P
228	Q						Q
229	G						G
230	P						P
231	P						P
232	P						P
233	A						A
234	G						G
235	L						L
236	L						L
237	H						H

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Fig. 110

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
29	M						M
28	V						V
27	C						C
26	L						L
25	K	R					Q
24	F	L					LL
23	P						P
22	G						G
21	G						G
20	S						S
19	C						C
18	M						M
17	A	T					Q
16	A	V					Q
15	L						L
14	T						T
13	V						V
12	T						T
11	L						L
10	M						M
9	V						V
8	L						L
8	S						S
6	S						S
5	P						P
4	L						L
3	A						A
2	L						L
1	A	S					Q
1	G						G
2	D						D
3	T						T
4	Q	R					Q
5	P						P
6	R						R
7	F						F
8	L						L
9	E	K	W				Q
10	E	Q	Y				Q
11	D	G	L	P	S	V	Q
12	K	T					Q
13	F	G	H	R	S	Y	Q
14	E	K					Q
15	C						C
16	H	Q	Y				Q
17	F						F
18	F						F
19	N						N
20	G						G
21	T						T
22	E						E
23	R						R
24	V						V
25	Q	R					Q
26	F	L	Y				Q
27	L						L
28	D	E	H				Q
29	R						R
30	C	G	H	L	R	Y	Q

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Fig. 111

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
31	F	I	V				()
32	H	Y					()
33	H	N					()
34	Q						Q
35	E						E
36	E						E
37	F	L	N	S	Y		()
38	A	L	V				()
39	R						R
40	F	Y					()
41	D						D
42	S						S
43	D						D
44	V						V
45	G						G
46	E						E
47	F	Y					()
48	R						R
49	A						A
50	V						V
51	T						T
52	E						E
53	L						L
54	G						G
55	R						R
56	P						P
57	A	D	S	V			()
58	A	E					()
59	E						E
60	H	S	Y				()
61	W						W
62	N						N
63	S						S
64	Q						Q
65	K						K
66	D						D
67	F	I	L				()
68	L						L
69	E						E
70	D	Q	R				()
71	A	E	K	R			()
72	R						R
73	A	G					()
74	A	E	L	Q	R		()
75	V						V
76	D						D
77	N	T					()
78	V	Y					()
79	C						C
80	R						R
81	H						H
82	N						N
83	Y						Y
84	G						G
85	A	V					()
86	G	V					()
87	E						E
88	S						S
89	F						F

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Fig. 112

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
90	T						T
91	V						V
92	Q						Q
93	R						R
94	R						R
95	V						V
96	E	H	Q	Y			Q
97	P						P
98	E	K					Q
99	V						V
100	T						T
101	V						V
102	Y						Y
103	P						P
104	A	S					Q
105	K						K
106	T						T
107	Q						Q
108	P						P
109	L						L
110	Q						Q
111	H						H
112	H						H
113	N						N
114	L						L
115	L						L
116	V						V
117	C						C
118	S						S
119	V						V
120	N	S					Q
121	F						F
122	G						G
123	Y						Y
124	P						P
125	G						G
126	S						S
127	I						I
128	E						E
129	V						V
130	R						R
131	W						W
132	F						F
133	L	R					Q
134	N						N
135	G						G
136	Q						Q
137	E						E
138	E						E
139	K						K
140	A	T					Q
141	G						G
142	M	V					Q
143	V						V
144	S						S
145	T						T
146	G						G
147	L						L
148	I						I

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Fig. 113

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
149	H	Q					I
150	N						N
151	G						G
152	D						D
153	W						W
154	T						T
155	F						F
156	Q						Q
157	T						T
158	L						L
159	V						V
160	M						M
161	L						L
162	E						E
163	T						T
164	F	V					I
165	P						P
166	Q	R					I
167	S						S
168	G						G
169	E						E
170	V						V
171	Y						Y
172	T						T
173	C						C
174	Q						Q
175	V						V
176	E						E
177	H						H
178	P						P
179	S						S
180	L	V					I
181	M	T					I
182	S						S
183	P						P
184	L						L
185	T						T
186	V						V
187	E						E
188	W						W
189	R	S					I
190	A						A
191	R						R
192	S						S
193	E						E
194	S						S
195	A						A
196	Q						Q
197	S						S
198	K						K
199	M						M
200	L						L
201	S						S
202	G						G
203	V						V
204	G						G
205	G						G
206	F						F
207	V						V

U.S. Patent Application No. 10/681,352
Amendment After Allowance dated August 20, 2009
Reply to Notice to File Corrected Application Papers of August 11, 2009
Replacement Sheet

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Fig. 114

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
208	L						L
209	G						G
210	L						L
211	L						L
212	F						F
213	L						L
214	G						G
215	A						A
216	G						G
217	L						L
218	F						F
219	I						I
220	Y						Y
221	F						F
222	R						R
223	N						N
224	Q						Q
225	K						K
226	G						G
227	H						H
228	S						S
229	G						G
230	L						L
231	P	Q					Q
232	P						P
233	R	T					T
234	G						G
235	F						F
236	L						L
237	S						S

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Fig. 115

Position	Diverse Amino Acid						Amino Acid Configuration With Less Tendency to Malignancy
29	M						M
28	M						M
27	V						V
26	L						L
25	Q						Q
24	V						V
23	S						S
22	A						A
21	A						A
20	P						P
19	R						R
18	T						T
17	V						V
16	A						A
15	L						L
14	T						T
13	A						A
12	L						L
11	L						L
10	M						M
9	V						V
8	L						L
7	L						L
6	T						T
5	S						S
4	V						V
3	V						V
2	Q						Q
1	G						G
1	R						R
2	A						A
3	T						T
4	P						P
5	E						E
6	N						N
7	Y						Y
8	L	V					LL
9	F	H	Y				U
10	Q						Q
11	G	L					LL
12	R						R
13	Q						Q
14	E						E
15	C						C
16	Y						Y
17	A						A
18	F						F
19	N						N
20	G						G
21	T						T
22	Q						Q
23	R						R
24	F						F
25	L						L
26	E						E
27	R						R
28	Y						Y
29	I						I
30	Y						Y

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Fig. 116

Position	Diverse Amino Acid						Amino Acid Configuration With Less Tendency to Malignancy
31	N						N
32	R						R
33	E						E
34	E						E
35	F	L	Y				Q
36	A	V					Q
37	R						R
38	F						F
39	D						D
40	S						S
41	D						D
42	V						V
43	G						G
44	E						E
45	F						F
46	R						R
47	A						A
48	V						V
49	T						T
50	E						E
51	L						L
52	G						G
53	R						R
54	P						P
55	A	D	E				Q
56	A	E					Q
57	D	E					EE
58	Y						Y
59	W						W
60	N						N
61	S						S
62	Q						Q
63	K						K
64	D						D
65	F	I	L				Q
66	L						L
67	E						E
68	E						E
69	E	K					Q
70	R						R
71	A						A
72	V						V
73	P						P
74	D						D
75	R						R
76	I	M	V				H
77	C						C
78	R						R
79	H						H
80	N						N
81	Y						Y
82	E						E
83	L						L
84	D	G					GG
85	E	G					GG
86	A	P					MM
87	M	V					MM
88	T						T
89	L						L

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Fig. 117

Position	Diverse Amino Acid						Amino Acid Configuration With Less Tendency to Malignancy
90	Q						Q
91	R						R
92	R						R
93	V						V
94	Q						Q
95	P						P
96	K	R					()
97	V						V
98	N						N
99	V						V
100	S						S
101	P						P
102	S						S
103	K						K
104	K						K
105	G						G
106	P						P
107	L						L
108	Q						Q
109	H						H
110	H						H
111	N						N
112	L						L
113	L						L
114	V						V
115	C						C
116	H						H
117	V						V
118	T						T
119	D						D
120	F						F
121	Y						Y
122	P						P
123	G						G
124	S						S
125	I						I
126	Q						Q
127	V						V
128	R						R
129	W						W
130	F						F
131	L						L
132	N						N
133	G						G
134	Q						Q
135	E						E
136	E						E
137	T						T
138	A						A
139	G						G
140	V						V
141	V						V
142	S						S
143	T						T
144	N						N
145	L						L
146	I						I
147	R						R
148	N						N

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Fig. 118

Position	Diverse Amino Acid						Amino Acid Configuration With Less Tendency to Malignancy
149	G						G
150	D						D
151	W						W
152	T						T
153	F						F
154	Q						Q
155	I						I
156	L						L
157	V						V
158	M						M
159	L						L
160	E						E
161	M						M
162	T						T
163	P						P
164	Q						Q
165	Q						Q
166	G						G
167	D						D
168	V						V
169	Y						Y
170	I	T					(I)
171	C						C
172	Q						Q
173	V						V
174	E						E
175	H						H
176	T						T
177	S						S
178	L	M					(L)
179	D						D
180	S						S
181	P						P
182	V						V
183	T						T
184	V						V
185	E						E
186	W						W
187	K						K
188	A						A
189	Q						Q
190	S						S
191	D						D
192	S						S
193	A						A
194	R						R
195	S						S
196	K						K
197	T						T
198	L						L
199	T						T
200	G						G
201	A						A
202	G						G
203	G						G
204	F						F
205	V						V
206	L						L
207	G						G

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Fig. 119

Position	Diverse Amino Acid						Amino Acid Configuration With Less Tendency to Malignancy
208	L						L
209	I						I
210	I						I
211	C						C
212	G						G
213	V						V
214	G						G
215	I						I
216	F						F
217	M						M
218	H						H
219	R						R
220	R						R
221	S						S
222	K						K
223	K						K
224	V						V
225	Q						Q
226	R						R
227	G						G
228	S						S
229	A						A

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Fig. 120

Position	Diverse Amino Acid						Amino Acid Configuration With Less Tendency to Malignancy
32	M						M
31	S						S
30	W						W
29	K						K
28	K						K
27	A	S					()
26	L						L
25	R						R
24	I						I
23	P						P
22	G						G
21	D	G					()
20	L						L
19	R						R
18	A	V					()
17	A						A
16	T						T
15	V						V
14	T						T
13	L						L
12	M						M
11	L						L
10	A	S					()
9	I	M					()
8	L						L
7	S						S
6	S	T					()
5	L	P	S				()
4	L	V					()
3	A						A
2	E						E
1	G						G
1	R						R
2	D						D
3	P	S					()
4	P						P
5	E						E
6	D						D
7	F						F
8	V						V
9	F	L	Y				()
10	Q						Q
11	F						F
12	K						K
13	A	G					()
14	L	M					()
15	C						C
16	Y						Y
17	F						F
18	T						T
19	N						N
20	G						G
21	T						T
22	E						E
23	L	R					()
24	V						V
25	R						R
26	G	L	Y				()
27	V						V

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Fig. 121

Position	Diverse Amino Acid						Amino Acid Configuration With Less Tendency to Malignancy
28	S	T					S or ()
29	R						R
30	H	S	Y				()
31	I						I
32	Y						Y
33	N						N
34	R						R
35	E						E
36	E						E
37	D	I	Y				()
38	A	V					()
39	R						R
40	F						F
41	D						D
42	S						S
43	D						D
44	V						V
45	E	G					()
46	E	V					()
47	F	Y					()
48	R						R
49	A						A
50	V						V
51	T						T
52	L	P					()
53	L	Q					()
54	G						G
55	L	P	R				()
56	L	P					()
57	A	D	S	V			()
58	A						A
59	E						E
60	Y						Y
61	W						W
62	N						N
63	S						S
64	Q						Q
65	K						K
66	D	E					()
67	I	V					()
68	L						L
69	E						E
70	E	G	R				()
71	A	D	K	T			()
72	R						R
73	A						A
74	A	E	S				()
75	L	V					()
76	D						D
77	R	T					()
78	V						V
79	C						C
80	R						R
81	H						H
82	N						N
83	Y						Y
84	E	Q					()
85	L	V					()
86	A	E	G				EG

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Fig. 122

Position	Diverse Amino Acid						Amino Acid Configuration With Less Tendency to Malignancy
87	F	L	Y				()
88	R						R
89	G	T					()
90	I	T					()
91	L						L
92	Q						Q
93	R						R
94	R						R
95	V						V
96	E						E
97	P						P
98	T						T
99	V						V
100	T						T
101	I						I
102	S						S
103	P						P
104	S						S
105	R						R
106	T						T
107	E						E
108	A						A
109	L						L
110	N						N
111	H						H
112	H						H
113	N						N
114	L						L
115	L						L
116	I	V					()
117	C						C
118	S						S
119	V						V
120	T						T
121	D						D
122	F						F
123	Y						Y
124	P						P
125	A	G	S				()
126	H	Q					()
127	I						I
128	K						K
129	V						V
130	Q	R					()
131	W						W
132	F						F
133	R						R
134	N						N
135	D						D
136	Q						Q
137	E						E
138	E						E
139	T						T
140	A	T					()
141	G						G
142	V						V
143	V						V
144	S						S
145	T						T

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Fig. 123

Position	Diverse Amino Acid						Amino Acid Configuration With Less Tendency to Malignancy
146	P						P
147	L						L
148	I						I
149	R						R
150	N						N
151	G						G
152	D						D
153	W						W
154	T						T
155	F						F
156	Q						Q
157	I						I
158	L						L
159	V						V
160	M						M
161	L						L
162	E						E
163	M						M
164	T						T
165	P						P
166	Q						Q
167	H	R					()
168	G						G
169	D						D
170	V						V
171	Y						Y
172	T						T
173	C						C
174	H						H
175	V						V
176	E						E
177	H						H
178	P						P
179	S						S
180	L						L
181	Q						Q
182	N	S					()
183	P						P
184	I						I
185	I	T					()
186	V						V
187	E						E
188	W						W
189	R						R
190	A						A
191	Q						Q
192	S						S
193	E						E
194	S						S
195	A						A
196	Q						Q
197	N	S					()
198	K						K
199	M						M
200	L						L
201	S						S
202	G						G
203	I	V					()
204	G						G

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Fig. 124

Position	Diverse Amino Acid						Amino Acid Configuration With Less Tendency to Malignancy
205	G						G
206	F						F
207	V						V
208	L						L
209	G						G
210	L						L
211	I						I
212	F						F
213	L						L
214	G						G
215	L						L
216	G						G
217	L						L
218	I						I
219	I						I
220	H	R					()
221	H	Q					()
222	R						R
223	S						S
224	Q	R					()
225	K						K
226	G						G
227	P						P
228	Q						Q
229	G						G
230	P						P
231	P						P
232	P						P
233	A						A
234	G						G
235	L						L
236	L						L
237	H						H

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Fig. 125

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases	Amino Acid Configuration to Inhibit Metastases
29	M						M	M
28	V						V	V
27	C						C	C
26	L						L	L
25	K	R					()	()
24	F	L					()	()
23	P						P	P
22	G						G	G
21	G						G	G
20	S						S	S
19	C						C	C
18	M						M	M
17	A	T					()	()
16	A	V					()	()
15	L						L	L
14	T						T	T
13	V						V	V
12	T						T	T
11	L						L	L
10	M						M	M
9	V						V	V
8	L						L	L
7	S						S	S
6	S						S	S
5	P						P	P
4	L						L	L
3	A						A	A
2	L						L	L
1	A	S					()	()
1	G						G	G
2	D						D	D
3	T						T	T
4	Q	R					()	()
5	P						P	P
6	R						R	R
7	F						F	F
8	L						L	L
9	E	K	W				()	()
10	E	Q	Y				()	()
11	D	G	L	P	S	V	()	()
12	K	T					()	()
13	F	G	H	R	S	Y	()	FF or GR
14	E	K					()	()
15	C						C	C
16	H	Q	Y				()	YY
17	F						F	F
18	F						F	F
19	N						N	N
20	G						G	G
21	T						T	T
22	E						E	E
23	R						R	R
24	V						V	V
25	Q	R					()	()
26	F	L	Y				()	()
27	L						L	L
28	D	E	H				()	()
29	R						R	R
30	C	G	H	L	R	Y	()	()

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Fig. 126

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases	Amino Acid Configuration to Inhibit Metastases
31	F	I	V				()	()
32	H	Y					()	()
33	H	N					()	NN
34	Q						Q	Q
35	E						E	E
36	E						E	E
37	F	L	N	S	Y		()	()
38	A	L	V				()	()
39	R						R	R
40	F	Y					()	()
41	D						D	D
42	S						S	S
43	D						D	D
44	V						V	V
45	G						G	G
46	E						E	E
47	F	Y					()	()
48	R						R	R
49	A						A	A
50	V						V	V
51	T						T	T
52	E						E	E
53	L						L	L
54	G						G	G
55	R						R	R
56	P						P	P
57	A	D	S	V			()	()
58	A	E					()	()
59	E						E	E
60	H	S	Y				()	()
61	W						W	W
62	N						N	N
63	S						S	S
64	Q						Q	Q
65	K						K	K
66	D						D	D
67	F	I	L				()	()
68	L						L	L
69	E						E	E
70	D	Q	R				()	()
71	A	E	K	R			()	()
72	R						R	R
73	A	G					()	()
74	A	E	L	Q	R		()	()
75	V						V	V
76	D						D	D
77	N	T					()	()
78	V	Y					()	()
79	C						C	C
80	R						R	R
81	H						H	H
82	N						N	N
83	Y						Y	Y
84	G						G	G
85	A	V					()	()
86	G	V					()	()
87	E						E	E
88	S						S	S
89	F						F	F

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Fig. 127

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases	Amino Acid Configuration to Inhibit Metastases
90	T						T	T
91	V						V	V
92	Q						Q	Q
93	R						R	R
94	R						R	R
95	V						V	V
96	E	H	Q	Y			()	()
97	P						P	P
98	E	K					()	()
99	V						V	V
100	T						T	T
101	V						V	V
102	Y						Y	Y
103	P						P	P
104	A	S					()	()
105	K						K	K
106	T						T	T
107	Q						Q	Q
108	P						P	P
109	L						L	L
110	Q						Q	Q
111	H						H	H
112	H						H	H
113	N						N	N
114	L						L	L
115	L						L	L
116	V						V	V
117	C						C	C
118	S						S	S
119	V						V	V
120	N	S					()	()
121	F						F	F
122	G						G	G
123	Y						Y	Y
124	P						P	P
125	G						G	G
126	S						S	S
127	I						I	I
128	E						E	E
129	V						V	V
130	R						R	R
131	W						W	W
132	F						F	F
133	L	R					()	()
134	N						N	N
135	G						G	G
136	Q						Q	Q
137	E						E	E
138	E						E	E
139	K						K	K
140	A	T					()	()
141	G						G	G
142	M	V					()	()
143	V						V	V
144	S						S	S
145	T						T	T
146	G						G	G
147	L						L	L
148	I						I	I

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Fig. 128

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases	Amino Acid Configuration to Inhibit Metastases
149	H	Q					()	()
150	N						N	N
151	G						G	G
152	D						D	D
153	W						W	W
154	T						T	T
155	F						F	F
156	Q						Q	Q
157	T						T	T
158	L						L	L
159	V						V	V
160	M						M	M
161	L						L	L
162	E						E	E
163	T						T	T
164	F	V					()	()
165	P						P	P
166	Q	R					()	()
167	S						S	S
168	G						G	G
169	E						E	E
170	V						V	V
171	Y						Y	Y
172	T						T	T
173	C						C	C
174	Q						Q	Q
175	V						V	V
176	E						E	E
177	H						H	H
178	P						P	P
179	S						S	S
180	L	V					()	()
181	M	T					()	()
182	S						S	S
183	P						P	P
184	L						L	L
185	T						T	T
186	V						V	V
187	E						E	E
188	W						W	W
189	R	S					()	()
190	A						A	A
191	R						R	R
192	S						S	S
193	E						E	E
194	S						S	S
195	A						A	A
196	Q						Q	Q
197	S						S	S
198	K						K	K
199	M						M	M
200	L						L	L
201	S						S	S
202	G						G	G
203	V						V	V
204	G						G	G
205	G						G	G
206	F						F	F
207	V						V	V

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Fig. 129

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases	Amino Acid Configuration to Inhibit Metastases
208	L						L	L
209	G						G	G
210	L						L	L
211	L						L	L
212	F						F	F
213	L						L	L
214	G						G	G
215	A						A	A
216	G						G	G
217	L						L	L
218	F						F	F
219	I						I	I
220	Y						Y	Y
221	F						F	F
222	R						R	R
223	N						N	N
224	Q						Q	Q
225	K						K	K
226	G						G	G
227	H						H	H
228	S						S	S
229	G						G	G
230	L						L	L
231	P	Q					()	()
232	P						P	P
233	R	T					()	()
234	G						G	G
235	F						F	F
236	L						L	L
237	S						S	S